AMENDMENT

Please cancel claims 1-14, 23-32, 36-50 and 68-83.

Claims 1-14 (cancelled).

15. (amended) ~~[The]~~ A theta defensin [of claim 14,] having the amino acid sequence:

Gly-Phe-Cys-Arg-Cys-Ile-Cys-Thr-Arg-Gly-Phe-Cys-Arg-Cys-Ile-Cys-Thr-Arg (SEQ ID NO:30).

16. (original) The theta defensin of claim 15, wherein the Gly at position 1 is linked through a peptide bond to the Arg at position 18.

17. (original) The theta defensin of claim 16, wherein an intrachain crosslink is formed between two amino acids selected from the group consisting of:

Cys at position 3 and Cys at position 16;

Cys at position 5 and Cys at position 14; and

Cys at position 7 and Cys at position 12.

18. (original) The theta defensin of claim 17, wherein a disulfide bond is formed between:

Cys at position 3 and Cys at position 16;

Cys at position 5 and Cys at position 14; and

Cys at position 7 and Cys at position 12.

19. (amended) ~~[The]~~ A theta defensin [of claim 14,] having the amino acid sequence:

Gly-Val-Cys-Arg-Cys-Leu-Cys-Arg-Arg-Gly-Val-Cys-Arg-Cys-Leu-Cys-Arg-Arg (SEQ ID NO:31).

20. (original) The theta defensin of claim 19, wherein the Gly at position 1 is linked through a peptide bond to the Arg at position 18.

21. (original) The theta defensin of claim 20, wherein an intrachain crosslink is formed between two amino acids selected from the group consisting of:

Cys at position 3 and Cys at position 16;

Cys at position 5 and Cys at position 14; and

Cys at position 7 and Cys at position 12.

22. (original) The theta defensin of claim 21, wherein a disulfide bond is formed between:

Cys at position 3 and Cys at position 16;

Cys at position 5 and Cys at position 14; and

Cys at position 7 and Cys at position 12.

Claims 23-32 (cancelled).

33. (amended) A pharmaceutical composition, comprising the theta defensin of claim ~~[1]~~ 15 and a pharmaceutically acceptable carrier.

34. (original) The pharmaceutical composition of claim 33, which is associated with a liposome.

35. (original) The pharmaceutical composition of claim 33, which is associated with a non-liposome lipid complex.

Claims 36-50 (cancelled).

51. (amended) A method of reducing or inhibiting growth or survival of a microorganism in an environment capable of sustaining the growth or survival of the microorganism, comprising administering an effective amount of ~~[a]~~ the theta defensin of claim 15 to said environment, thereby reducing or inhibiting the growth or survival of the microorganism.

52. (original) The method of claim 51, which has antimicrobial activity against a microorganism selected from the group consisting of a gram positive bacterium, a gram negative bacterium, a yeast and a fungus.

53. (original) The method of claim 52, wherein said microorganism is selected from the group consisting of *Staphylococcus* sp., *Listeria* sp., *Escherichia* sp., *Salmonella* sp., *Candida* sp., and *Cryptococcus* sp.

54. (original) The method of claim 53, wherein said microorganism is selected from the group consisting of *Staphylococcus aureus, Listeria monocytogenes, Escherichia coli, Salmonella typhimurium, Candida albicans*, and *Cryptococcus neoformans*.

55. (original) The method of claim 51, which has antimicrobial activity against a protozoan.

56. (original) The method of claim 55, wherein said protozoan is selected from the group consisting of *Giardia* sp. and *Acanthamoeba* sp.

57. (original) The method of claim 51, which has antimicrobial activity against a virus.

58. (original) The method of claim 57, wherein said virus is human immunodeficiency virus-1.

59. (original) The method of claim 51, wherein said environment is a food or food product.

60. (original) The method of claim 51, wherein said environment is a solution.

61. (original) The method of claim 60, wherein said solution is a contact lens solution.

62. (original) The method of claim 60, wherein said solution is an eye wash solution.

63. (original) The method of claim 51, wherein said environment is an inanimate object comprising a surface.

64. (original) The method of claim 51, wherein said environment is a mammal.

65. (original) The method of claim 51, wherein said administration is topical.

66. (original) The method of claim 51, wherein said administration is by injection.

67. (original) The method of claim 51, wherein said administration is oral.

Claims 68-83 (cancelled).

Please add the following new claims.

84. (new) A pharmaceutical composition, comprising the theta defensin of claim 19 and a pharmaceutically acceptable carrier.

85. (new) The pharmaceutical composition of claim 84, which is associated with a liposome.

86. (new) The pharmaceutical composition of claim 84, which is associated with a non-liposome lipid complex.

87. (new) A method of reducing or inhibiting growth or survival of a microorganism in an environment capable of sustaining the growth or survival of the microorganism, comprising administering an effective amount of the theta defensin of claim 19 to said environment, thereby reducing or inhibiting the growth or survival of the microorganism.

88. (new) The method of claim 87, which has antimicrobial activity against a microorganism selected from the group consisting of a gram positive bacterium, a gram negative bacterium, a yeast and a fungus.

89. (new) The method of claim 88, wherein said microorganism is selected from *the group consisting of Staphylococcus sp., Listeria sp., Escherichia sp., Salmonella sp., Candida* sp., and *Cryptococcus* sp.

90. (new) The method of claim 89, wherein said microorganism is selected from the group consisting of *Staphylococcus aureus, Listeria monocytogenes, Escherichia coli, Salmonella typhimurium, Candida albicans,* and *Cryptococcus neoformans.*

91. (new) The method of claim 87, which has antimicrobial activity against a protozoan.

92. (new) The method of claim 91, wherein said protozoan is selected from the group consisting of *Giardia* sp. and *Acanthamoeba* sp.

93. (new) The method of claim 87, which has antimicrobial activity against a virus.

94. (new) The method of claim 93, wherein said virus is human immunodeficiency virus-1.

95. (new) The method of claim 87, wherein said environment is a food or food product.

96. (new) The method of claim 87, wherein said environment is a solution.

97. (new) The method of claim 96, wherein said solution is a contact lens solution.

98. (new) The method of claim 96, wherein said solution is an eye wash solution.

99. (new) The method of claim 87, wherein said environment is an inanimate object comprising a surface.

100. (new) The method of claim 87, wherein said environment is a mammal.

101. (new) The method of claim 87, wherein said administration is topical.

102. (new) The method of claim 87, wherein said administration is by injection.

103. (new) The method of claim 87, wherein said administration is oral.

104. (new) An isolated nucleic acid molecule encoding the theta defensin of claim 15.

105. (new) A vector encoding a theta defensin, said vector comprising an expression element operationally linked to a nucleotide sequence encoding a theta defensin peptide, said nucleotide sequence comprising the nucleic acid molecule of claim 104.

106. (new) A method of expressing a theta defensin, comprising

(a) administering the vector of claim 105 to a cell; and

(b) expressing said encoded theta defensin peptides, wherein said peptides form a theta defensin.

107. (new) An isolated nucleic acid molecule encoding the theta defensin of claim 19.

108. (new) A vector encoding a theta defensin, said vector comprising an expression element operationally linked to a nucleotide sequence encoding a theta defensin peptide, said nucleotide sequence comprising the nucleic acid molecule of claim 106.

109. (new) A method of expressing a theta defensin, comprising

(a) administering the vector of claim 108 to a cell; and

(b) expressing said encoded theta defensin peptides, wherein said peptides form a theta defensin.